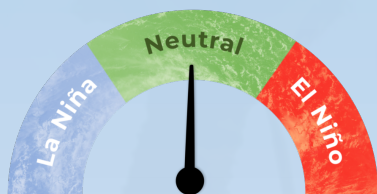


### Recent



Current ENSO

During May 2021, the tropical Pacific remained in ENSO neutral conditions.

Sea surface temperatures (SSTs) in the equatorial Pacific were in the ENSO “neutral” range during May.

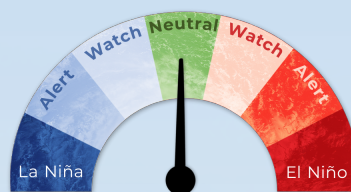
The Southern Oscillation Index (SOI) was +0.5 during May (neutral range). The three-month average SOI was +0.3 (neutral range).

# 73%

chance for the continuation of ENSO neutral conditions during June - August 2021.

Chance for ENSO neutral conditions during September - November 2021.

# 49%



Neutral

### Forecast

## ENSO situation summary

The NINO3.4 Index anomaly (in the central Pacific) during May (through the 30th) was  $-0.11^{\circ}\text{C}$ , the smallest anomaly since July 2020. The Southern Oscillation Index (SOI) was +0.5, in the ENSO neutral range.

In the equatorial Pacific, upper-oceanic heat content increased for the third consecutive month, while further warming was observed in the sub-surface, reaffirming an end to La Niña.

According to the consensus from international models, the probability for ENSO neutral conditions is 73% during June to August. For September to November and December to February, the probability for ENSO neutral is 49% and 48%, respectively. There is about a 1-in-3 chance that La Niña redevelops during September to November.

Since ENSO neutral conditions are occurring, the MJO is expected to be a primary mode of climate variability over the coming season.

During May, convective forcing was influenced primarily by the active phase of the Madden-Julian Oscillation (MJO) over Africa and the Indian Ocean, before propagating eastward to end the month. These pulses of the active phase of the MJO resulted in enhanced convection (greater than normal rainfall) for parts of Palau, Federated states of Paula Micronesia, Marshall Islands, New Caledonia, Vanuatu, Fiji, Tonga and the Southern Cook Islands.

## Rainfall outlook for June – August 2021

**Above normal rainfall** for Papua New Guinea, Vanuatu North, Vanuatu South, Fiji, Tonga and Niue

**Above or near normal rainfall** for Marshall Islands, New Caledonia, Southern Cook Islands and Austral Islands.

**Near or below normal rainfall** for Northern Marianas, Federated States of Micronesia and Solomon Islands.

**Below normal rainfall** for Palau, Guam, Nauru, Kiribati (Gilbert, Phoenix and Line Islands), Tuvalu, Tokelau, Wallis & Futuna, Samoa, American Samoa, Northern Cook Islands, Society Islands, Marquesas, Tuamotu/Gambier Islands and Pitcairn Islands.

## Rainfall outlook table for June - August 2021


ISLAND	PROBABILITY (%)			OUTLOOK	CONFIDENCE
	Below	Normal	Above		
Vanuatu North	14	15	71	ABOVE	Moderate-High
Fiji	18	19	63	ABOVE	High
Vanuatu South	16	23	61	ABOVE	High
Papua New Guinea	17	24	59	ABOVE	High
Tonga	18	23	59	ABOVE	High
Niue	24	25	51	ABOVE	Moderate-High
Marshall Islands	22	35	43	AVG - ABOVE	High
Southern Cook Islands	24	34	42	AVG - ABOVE	High
New Caledonia	26	36	38	AVG - ABOVE	High
Austral Islands	28	37	35	AVG - ABOVE	High
Solomon Islands	35	34	31	AVG-BELOW	High
FSM	35	34	31	AVG-BELOW	High
Northern Marianas	34	37	29	AVG-BELOW	High
Society Islands	42	31	27	BELOW	High
Wallis & Futuna	44	30	26	BELOW	Moderate-High
Guam	48	27	25	BELOW	Moderate-High
American Samoa	49	26	25	BELOW	Moderate-High
Palau	50	25	25	BELOW	Moderate-High
Pitcairn Islands	52	25	23	BELOW	High
Samoa	51	27	22	BELOW	Moderate-High
Kiribati: Gilbert Islands	72	15	13	BELOW	High
Nauru	74	13	13	BELOW	Moderate-High
Tuamotu Islands	59	29	12	BELOW	High
Kiribati: Line Islands	62	27	11	BELOW	High
Kiribati: Phoenix Islands	87	7	6	BELOW	High
Northern Cook Islands	93	5	2	BELOW	High
Tokelau	95	3	2	BELOW	High
Marquesas	61	38	1	BELOW	High
Tuvalu	97	2	1	BELOW	High

Note: Rainfall estimates for Pacific Islands for the next three months are given in terms of tercile probabilities (e.g. 20:30:50). These are derived from the averages of several global climate models. They correspond to the odds of the observed rainfall being in the lowest one third of the distribution, the middle one third, or the highest one third of the distribution. For the long term average, it is equally likely (33% chance) that conditions in any of the three terciles will occur. \*If conditions are climatology, we expect an equal chance of the rainfall being in any tercile.

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The Island Climate Update is prepared as soon as possible following the end of the month, once the data and information are received from the Pacific Island meteorological services. Delays in data collection and communication occasionally arise. While every effort is made to verify observational data, NIWA does not guarantee the accuracy and reliability of the analysis and forecast information presented, and accepts no liability for any losses incurred through the use of this advisory and its contents.

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For more information see: <https://www.niwa.co.nz/pacific-rim/publications>  <https://www.facebook.com/IslandClimateUpdate/>



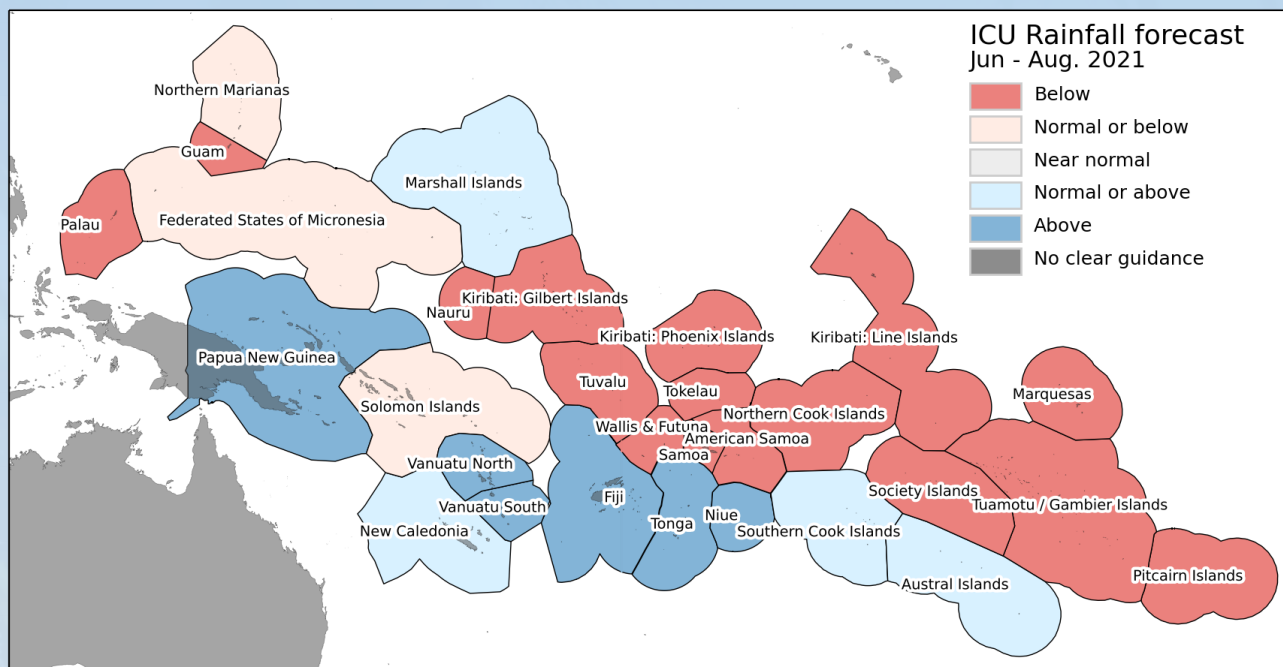
**NIWA**  
Taihoro Nukurangi

# The Island Climate Update

Drought Watch

June 2021

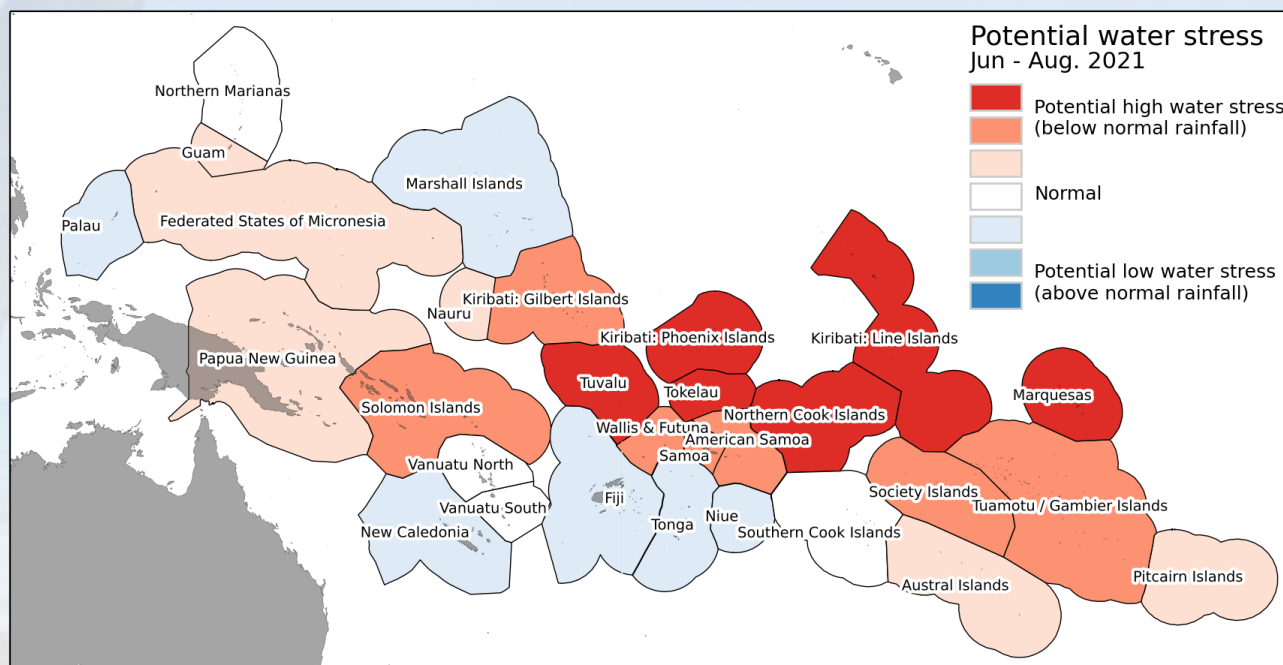
## June - August 2021 rainfall forecast



## Regional drought potential advisory

Based on rainfall anomaly classification over the past six months and forecast rainfall anomaly classification over the next 3 months

Parts of several island groups in the north-central and east may experience high water stress over the next three months, including **Tuvalu, Kiribati (Phoenix and Line Islands), Tokelau, Northern Cook Islands and Marquesas.** The **Solomon Islands, Kiribati (Gilbert Islands), Wallis & Futuna, Samoa, American Samoa, Society Islands and Tuamotu/Gambier Islands** may also experience water stress. These countries have received low rainfall over part of the past six months, and dry conditions are possible over the next three-month period.



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